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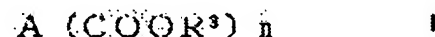
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## (54) PRODUCTION OF ALIPHATIC POLYCARBOXYLIC ACID AMIDE

## (57)Abstract:

**PURPOSE:** To obtain a new trivalent or tetravalent aliphatic polycarboxylic acid amide which is a useful material as an antioxidant, ultraviolet absorbent, antibacterial agent, mildew-proofing agent, nucleating agent, additive to polymers, etc.

**CONSTITUTION:** This compound is an aliphatic polycarboxylic acid amide expressed by formula I [A is a 3-10C aliphatic saturated carboxylic acid residue; X is NR<sub>1</sub>R<sub>2</sub> (R<sub>1</sub> and R<sub>2</sub> are each H, an alkyl, a halogenoalkyl, an alkenyl, a cycloalkyl, a cycloalkenyl, an aryl or an aralkyl); (n) is 3 or 4], e.g. 1,2,3- propanetricarboxylic acid tricyclohexylamide. A compound of formula I is obtained by heating an aliphatic polycarboxylic acid ester of formula II (R<sub>3</sub> is a 1-4C alkyl) and an amine of formula III without using a catalyst or in the presence of an acid catalyst to carry out ester-amide interchange reaction. By this process, the objective compound is easily and efficiently produced on an industrial scale at a low cost in high yield and purity.



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